

SEQUENCE LISTING

<110> Hepler, William T.
 Jiang, Yuqiu
 Pyle, Ruth A.
 Xu, Jiangchun

<120> COMPOSITIONS AND METHODS FOR THE THERAPY
 AND DIAGNOSIS OF COLON CANCER

<130> 210121.550

<140> US

<141> 2001-08-07

<160> 85

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 43

<212> PRT

<213> Homo sapiens

<220>

<221> VARIANT

<222> 40

<223> Xaa = Any Amino Acid

<400> 1

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Gly	Ser	Ala	Gln	Arg	Val	Glu	Tyr	Lys	Lys	Leu	Asn	Cys	Val	Asn	Thr
			20					25					30		
Trp	Lys	Thr	Thr	Val	Leu	Arg	Xaa	Pro	Ser	His					
		35					40								

<210> 2

<211> 87

<212> PRT

<213> Homo sapiens

<400> 2

Met	Ala	Ile	Ser	Arg	Gln	Ser	Ile	Tyr	Thr	Thr	Gly	Gln	Arg	Leu	Gly
1				5					10					15	
Gly	Thr	Ser	Pro	Arg	Gln	Met	Met	Ala	Pro	His	Pro	Leu	Cys	Phe	Leu
			20					25					30		
Thr	Thr	Gln	Val	Thr	Tyr	Val	Trp	Leu	Pro	Val	Arg	Lys	Leu	Pro	Phe
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Asn	Phe	Leu	Leu	Ser	Pro	Phe	Met	Ala	Gln	Val	Gly	Gly	Met	Met	Pro

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<210> 3
<211> 49
<212> PRT
<213> Homo sapiens
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<220>  
<221> VARIANT  
<222> 6, 24, 29, 47  
<223> Xaa = Any Amino Acid
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<400> 3
Met Ala Cys Arg Arg Xaa Gly Ser Cys Ile Cys Ile Tyr Trp Val His
  1             5             10             15
Ser Gln Asn Lys Gly Asp His Xaa Tyr Ile Gly Lys Xaa Asn Leu Asp
             20             25             30
Pro Ala Arg Ala Gly Pro Leu Glu Arg Ala Lys Phe Cys Arg Xaa Pro
             35             40             45
Ile

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<210> 4
<211> 79
<212> PRT
<213> Homo sapiens
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<220>  
<221> VARIANT  
<222> 67, 78  
<223> Xaa = Any Amino Acid
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<400> 4															
Met	Ala	Ser	Arg	Asp	Ser	Leu	Tyr	Leu	Pro	Gly	Arg	Pro	Leu	Glu	Arg
1				5					10					15	
Ala	Asn	Ser	Ala	Asp	Ile	His	His	Thr	Gly	Gly	Arg	Ser	Ser	Met	His
			20					25					30		
Leu	Glu	Gly	Pro	Ile	Arg	Pro	Ile	Val	Ser	Arg	Ile	Thr	Ile	His	Trp
		35					40					45			
Pro	Ser	Phe	Tyr	Asn	Val	Val	Thr	Gly	Lys	Thr	Leu	Arg	Tyr	Pro	Asn
	50					55					60				
Phe	Asn	Xaa	Leu	Ala	Ala	Thr	Ser	Pro	Leu	Phe	Ala	Gln	Xaa	Gly	
65					70					75					

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<210> 5
<211> 58
<212> PRT
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<213> Homo sapiens

<220>

<221> VARIANT

<222> 6, 29, 47

<223> Xaa = Any Amino Acid

<400> 5

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 1          5          10          15
Tyr Ala Gln Arg Asp Arg Tyr Thr Cys Gln Arg Pro Xaa Ala Arg Ser
          20          25          30
Phe Arg Phe Leu Pro Leu Pro Phe Ser Pro Arg Phe Gly Gly Xaa Ser
          35          40          45
Pro Val Lys Leu Leu Lys Ser Gly Gly Leu
          50          55
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<210> 6

<211> 43

<212> PRT

<213> Homo sapiens

<220>

<221> VARIANT

<222> 40

<223> Xaa = Any Amino Acid

<400> 6

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Met Glu Ala Glu Asp Ser Glu Ser Leu Ser Pro Lys Met Pro Gln Pro
 1          5          10          15
Gly Ser Ala Gln Arg Val Glu Tyr Lys Lys Leu Asn Cys Val Asn Thr
          20          25          30
Trp Lys Thr Thr Val Leu Arg Xaa Pro Ser His
          35          40
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<210> 7

<211> 39

<212> PRT

<213> Homo sapiens

<220>

<221> VARIANT

<222> 2, 13, 15, 17, 23, 32

<223> Xaa = Any Amino Acid

<400> 7

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 1          5          10          15
Xaa His Tyr Ile Arg Ile Xaa Ser Ile Gln Leu Pro Tyr Ser Pro Xaa
          20          25          30
His Ser Ile Pro Phe Gly Val
          35
```

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<400> 8
Met Phe Gly Glu Ile Pro Met Glu Lys Arg Glu Thr Cys Arg Arg Thr
 1             5             10             15
Ser Asn Lys Val Asn Val His Ala Gln Gly Leu Leu Lys Phe Gln Cys
 20             25             30
Val Asn Phe Leu Leu Ala Tyr Thr Lys Ile Lys
 35             40

```

<400> 9															
Met	Pro	Thr	Gly	Ser	Tyr	Trp	Val	Ser	Trp	Thr	Thr	Ser	Phe	Arg	Thr
1				5					10					15	
Arg	Thr	Ala	Ser	Ser	Ser	Ser	Pro	Leu	Cys	Thr	Ala	Ala	Glu	Gly	Pro
			20					25					30		
Ser	Leu	Gly	Leu	Gly	Thr	Leu	Arg	Gly	Glu	Asn	Glu	Ala	Ile	Arg	His
		35				40						45			
Pro	Leu	Gly	Pro	Cys	Phe	Gln	Val	Ser	Leu	Ser	Pro	Leu	Pro	Ala	Phe
	50					55					60				
Phe	Pro	Ala	Leu	Ser	Pro	Lys	Leu	Pro	Pro	Gly	Arg	Glu	Lys	Arg	Pro
65					70					75					80
Gly	Ala	Lys	Asn	Glu	Pro	Phe	Ser	Ser	Thr						
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<220>  
<221> VARIANT  
<222> 36, 42, 48  
<223> Xaa = Any Amino Acid
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<210> 11
 <211> 566
 <212> DNA
 <213> Homo sapiens

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 cgaaaaaaac tctacctctc tataactaat tccctacaaa tctccttaat tataacattc 180
 acagccacag aactaatcat attttatatc ttcttcgaaa ccacacttat cccacacctg 240
 gctatcatca cccgatgagg caaccagcca gaacgcctga acgcaggcac atacttccta 300
 ttctacaccc tagtaggctc ccttccccta ctcatcgcac taatttacac tcacaacacc 360
 ctaggctcac taaacattct actactcact ctactgccc aagaactatc aaactcctga 420
 gccacaact taatatgact agcttacaca atagctttta tagtaaagat acctctttac 480
 ggactccact tatgactccc taaagcccat gtcgaagccc ccacgcctgg gtcaatagta 540
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<210> 12
 <211> 517
 <212> DNA
 <213> Homo sapiens

<400> 12
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 tgtttctttt ttactcactg cagtatgagg aacaaatcac aaacacttac ttggagaaa 120
 cagagaccat agtgtagatt ttacaaaatc actttttaa atctctgtat tgtgctcctc 180
 aaatacctag agccagtctt tgcataaaat atcacagctt tatctataac cttaaaattc 240
 tgcagcagcc taaagatatg gataagatat accaccactt gctattctga aatatatcta 300
 ttaccatata caacctaatg atagtatcta aaaaattctt tcttccatag gaagtctctg 360
 acaagctgtt attcatttcc ttgacgttaa aagaatctgg ggccaacatt tgtattttat 420
 cagaaaaaaa taaaaaaaaa gtttacctac catgttcata ttaagaacaa tgtctataca 480
 agtcagttgt acctcgggcg cgaccacgct aaggcg 517

<210> 13
 <211> 411
 <212> DNA
 <213> Homo sapiens

<400> 13
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 agtttcccaa aaaaattatt tagaaggcat tatgttatta gttaaagaga gcactgtata 180
 gaactgttcc tattttctgc acttgccatt ccagctgcct ccactgtcca taccacctc 240
 attcatctg tcacagaagg caggaaaact gggaacttta ccaaagtagc actcagcctg 300
 agaggcctgt ataatacatg ttttcaaact aaattcactt aaaaattaaa aagcagaatt 360
 gaatatttta agcagcctca gtacctgccc gggcgggcgc tcgaaagggc g 411

<210> 14
 <211> 387
 <212> DNA
 <213> Homo sapiens

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 TGACTCCTAC
 CCCTCACAAT
 CATGGCAAGC
 CAACGCCACT
 TATCCAGTGA
 ACCACTATCA
 CGAAAAAAC
 TCTACCTCTC
 TATACTAATC
 TCCCTACAAA
 TCTCCTTAAT
 TATAACATTC
 ACAGCCACAG
 AACTAATCAT
 ATTTTATATC
 TTCTTCGAAA
 CCACACTTAT
 CCCCACCTTG
 GCTATCATCA
 CCCGATGAGG
 CAACCAGCCA
 GAACGCCTGA
 ACGCAGGCAC
 ATACTTCCTA
 TTCTACACCC
 TAGTAGGCTC
 CCTTCCCCTA
 CTCATCGCAC
 TAATTTACAC
 TCACAACACC
 CTAGGCTCAC
 TAAACATTCT
 ACTACTCACT
 CTCACTGCC
 AAGAACTATC
 AAACTCCTGA
 GCCACAACCT
 TAATATGACT
 AGCTTACACA
 ATAGCTTTTA
 TAGTAAAGAT
 ACCTCTTTAC
 GGACTCCACT
 TATGACTCCC
 TAAAGCCCAT
 GTCGAAGCCC
 CCATCGCTGG
 GTCAATAGTA
 CCTCGGGCCG
 GACCACGCTA
 AGGGCG

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<400> 17
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agcccaagac agatgatggc tccacacca ctgtgcttcc tgactactca agtgacctac 180
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```

gtgtggcttc cagtcaggaa actaccatth aactttctgc tcagcccttt catggctcag 240
gttggtggga tgatgccact gtcctaaacc cgaaggcaag ggagcttccc aggcctcagc 300
agcagttcct ggggtggcact gtcccatga tctgaagcag acatgaaatt acaatacgc 360
tttattcact catctcaaga aagctggctg gcccaagcct aaaaggccca taccaaaaaa 420
aaaaaaaaa aaaaaaaaag cttgtacctc ggccgcgacc acgctaaggg cg 472

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<210> 18
<211> 612
<212> DNA
<213> Homo sapiens

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<400> 18
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ttactattat gacacaaaca cagggaaga gggcaacta gacattgtaa tgcataagat 120
gcaggaaaaa gtgcagagca ttaactataa cccttttgac cagaaacttt atgtctataa 180
cgatggttac cttctgaatt atgatctttc tgtcttcgag aagccccagt aagctgttta 240
ggagttaggg tgaaagagaa aatgtttggt gaaaaaatag tcttctccac ttacttagat 300
atctgcaggg gtgtctaaaa gtgtgttcat tttgcagcaa tgtttaggtg catagtctta 360
ccacactaga gatctaggac atttgtcttg atttgggtgag ttctcttggg aatcatctgc 420
ctcttcaggc gcattttgca ataaagtcta tctagggtgg gattgtcaga ggtctagggg 480
cactgtgggc ctagtgaagc ctactgtgag gaggcctcac tagaagcctt aaattagga 540
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```

<210> 19
<211> 547
<212> DNA
<213> Homo sapiens

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<400> 19
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ttgtttcatg atttctcctc tctctctgat taaggcgttt atagaaaaaa gaactgaata 180
tatgaattcg gtcagcgtct tccttcttca gtttttcaag caccaagtat ttcaaataaa 240
agtctataat aacatcattt aaaaattctc cttcatttag acagtgcagg tcctcattgg 300
taacagagat gcctccctta gctggagggt gtggatatac tatcaacttt tctactgggc 360
caatgaagat ggtgtggttt tctccagttt cttcttcttc atcaaaaaac tgaaattctt 420
gtttgcttct aagttgtatt ttagattcaa atgatacagt ttttaattttg ttttcttttt 480
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aaggggcg 547

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<210> 20
<211> 395
<212> DNA
<213> Homo sapiens

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<220>
<221> misc_feature
<222> 71
<223> n = A,T,C or G

```

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<400> 20
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agtaattcag ntacagggtg accaacgcaa gaacatatgc cagttcctcg tagagattgg 120

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```

actggctaag gacgatcagc tgaagggttca tgggtttttaa gtgcttgtgg ctcaactgaag 180
cttaagttag gatttccttg caatgagtag aatttcctt ctctcccttg tcacagggtt 240
aaaaacctca cagcttgtat aatgtaacca tttgggtgcc gcttttaact tggactagt 300
taactccttc atgcaataaa ctgaaaagag ccaaaaaaaaa aaaaaaaaaa 360
aagcttgtag ctgggccgag accacgctaa gggcg 395

```

```

<210> 21
<211> 283
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 39, 72, 111, 116, 259
<223> n = A,T,C or G

```

```

<400> 21
aattcgccct ttcgagcggc cgcccgggca ggtactttta ggctttagg agggtaaaat 60
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ttagactatg gtgagctcag gtgattgata ctctgatgc gagtaatacg gatgtgttta 180
ggagtgggac ttctagggga tttagcgggg tgatgcctgt tgggggccag tgccctccta 240
attggggggg aggggctang ctggagtggg aaaaggctca gaa 283

```

```

<210> 22
<211> 414
<212> DNA
<213> Homo sapiens

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```

<220>
<221> misc_feature
<222> 39, 69, 71
<223> n = A,T,C or G

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<400> 22
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gcagcagatc atttcatatt gcttcogtgg agtgtggcga gtcagctaaa tactttgacg 180
ccggtgggga tagcgatgat tatggtagcg gaggtgaaat atgctcgtgt gtctacgtct 240
attcctactg taaatatatg gtgtgctcac acgataaacc ctaggaagcc aattgatatc 300
atagctcaga ccatacctat gtatccaaat acctcggccg cgaccacgct aagggcgaat 360
tctgcagata tccatcacac tggcgggccg tcagagcatg catctagagg gcc 414

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```

<210> 23
<211> 622
<212> DNA
<213> Homo sapiens

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<220>
<221> misc_feature
<222> 37, 67, 602
<223> n = A,T,C or G

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```

<400> 23
aattcgccct ttcgagcggc cgcccgggca ggtacanttt gaaaaattat atatatgggg 60

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<210> 24
<211> 665
<212> DNA
<213> Homo sapiens
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<400>	24						
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tcctggtctc	tcagctgggg	ccactgtcgg	catcatgatt	ggagtgtctg	ttggggttgc	240	
tctgatatag	cagccctggt	gtagttttct	catttcagga	agactgacag	ttgttttgct	300	
tcttccttaa	agcatttgca	acagctacag	tctaaaattg	cttctttacc	aaggatatatt	360	
acagaaaaaga	ctctgaccag	agatcgagac	catcctagcc	aacatcgtga	aaccccatct	420	
ctactaaaaa	tacaaaaatg	agctggggctt	ggtggcgcg	acctgtagtc	ccagttactc	480	
gggaggctga	ggcaggagaa	tcgcttgaac	ccgggagggt	gagattgcag	tgagcccaga	540	
tcgcaccact	gcactccagt	ctggcaacag	agcaagactc	catctcaaaa	agaaaagaaa	600	
agaagactct	gacctgtacc	tgcccgggcg	gccgctcgaa	gggcgaattc	tgcatatctc	660	
catca						665	

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<220>  
<221> misc_feature  
<222> 24, 320  
<223> n = A,T,C or G
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<210> 26

<211> 616
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 313
 <223> n = A,T,C or G

<400> 26
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 gattatTTTT cctTTTTgaa gtagattcgc cacaatcaaa tttgaatata gagaattttg 180
 aagtttaagc atcaaaacaac aaagtaaaag tccccaagat acaacaaaga tctaggcaag 240
 tcttggtcct gtcccaactcc caccaccacc ctaatgaaac ttaaaaggta ttcccatttc 300
 aattatggcc tgnatcattc ttggcagttt ggaaagagaa cttttggctt ccattggtaa 360
 ctcaacataa atgttgcata gaatttatat atttcaaaat tggcctaact tgtaaaaaag 420
 gcaaaatgga agcatttccg atagagccct aaatgagtac tggcctgtga cttctctgta 480
 tgacatcaca aggcgcgcaa gtgcctgttt ttctagaact aggagttggg gaggtttggg 540
 taagtgtcga aaccatgcat aggattgggt tactaaatta aaaccttatt acgtacctgc 600
 ccgggcgggc cgctcg 616

<210> 27
 <211> 220
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 74, 97, 194
 <223> n = A,T,C or G

<400> 27
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 agagctctcc cattggccca cggccttccct ccagcttttc tcttctgctt cacacaactt 180
 tgtgagatag ctgntttcat agctgggaaa actgaggccc 220

<210> 28
 <211> 368
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 346, 357
 <223> n = A,T,C or G

<400> 28
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 taggaaatgg caaaaacctt acctagctgg acattttata caagtaagtc aaagttcaaa 180
 ggaatcatcc tatctttatt ctcaaaaaac caatgttgaa tatcacagtt cttctttaat 240
 ggaagcagaa gattcagagt ccttgtctcc caaaatgcct cagccagggt cagcacagag 300

CCDS:100000.1

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tagccaca                                         368

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<210> 29
<211> 265
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 38, 39, 70, 72
<223> n = A,T,C or G

```

```

<400> 29
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atcctcagca tcagtttgct aaattgccag gtcfaatgac aagctctcct gccatctcca 180
agcccacttt tcatagtacc gctctgtctt tggctgcagc actttaggca ctattctaag 240
tcctggagta tatcactctt gcttc                                         265

```

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<210> 30
<211> 195
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 38, 39, 72, 179
<223> n = A,T,C or G

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<400> 30
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atatagctta aaatataaatt ttttagcattt ggcaccatat gtatgccatt atatttgant 180
ttgcattact gtttc                                         195

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<210> 31
<211> 285
<212> DNA
<213> Homo sapiens

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<220>
<221> misc_feature
<222> 228, 255, 268
<223> n = A,T,C or G

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<400> 31
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gaaaaaattg tattgaaaac acttagtatg cagttgataa gaggaatttg gtataattat 180
ggtgggtgat tattttttat actgtatgtg ccaaagcttt actactgngg aaagacaact 240
gttttaataa aaganttaca ttccaaanaa aaaaaaaaaa aaaaaa                    285

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<210> 32

```

<211> 609
 <212> DNA
 <213> Homo sapiens

<400> 32
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 atggattttt tccccattg gctttcaaag caagtgagat aaacagcgtt actggcagat 240
 attggtcata aataacatct tcccaaagcc caacagtcaa aaaacaaaca ccaaataata 300
 gcagattagg cagatttctt aaatattcag ttaaggctat ggtgtgcttg gttttgacca 360
 gagcaattct atggcttctt tttatttttc tccctggata aaactatgct tacttgatcc 420
 atgcaatttc agttgttaca gctttaactt ataagatcaa aggaattaaa aagttgtcag 480
 aatagatttt caaataatga caaaaactga cataaagtct acacagaact gacataaagt 540
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 ctttctaag 609

<210> 33
 <211> 543
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 38, 451, 509, 537
 <223> n = A,T,C or G

<400> 33
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 atttcaaca gcatcgctga ttaaaggcac agaattctt tgaattattt tacaatttgg 180
 tagctcattt atatccagtt catcttgcaa atcacttctc ttttctatac tgatggctctc 240
 ttcattgtga tccaggctgg aagcacgtag tgcagcggac agcacttcca cttgtgcttt 300
 aacatctgga tcatcaatgt ggggctctag attttctatc atttcttcca gttcctttct 360
 ggtggccatg gtgatgtttg gagaactggg cacagggccc tcagattctt cctctggtcc 420
 ctctgggctg ggttttcccc cagagttctg ntcaagctct atgtctagat ctatttcagg 480
 aagaggagtc ctccagaaat ggaaggagnt atacaattcc tgatctaaga gagctgnatc 540
 ttg 543

<210> 34
 <211> 259
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 234, 255
 <223> n = A,T,C or G

<400> 34
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 aaatacagta attacaagta gtgtcaccat cagtgacaag ggcaggggaag actatttttc 180
 ctttttttcc caacttattc aaataactta acctcttcta tttcgagttc aaangaggta 240

aacatacaac ctcanaggt

259

<210> 35

<211> 346

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 38, 69, 70, 255, 280, 328, 337

<223> n = A,T,C or G

<400> 35

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ccattctgag tcatttggtc ttcttggcct gtcaagacac ccaaaaaagg ccaagctgtt 180
cacccaggga gccatactgg cacattcctt ctgcgcttga taatatctgt caattccctt 240
cagccaggga ccagncactt taggctatta gcctgcaggn catttagaag atttaagtaa 300
atatctgatt tgaggaacct gggataanag tccttttncca taagag 346

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<210> 36

<211> 834

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 698, 765, 769, 776, 792, 817

<223> n = A,T,C or G

<400> 36

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gcattatcac atgttgctaa gccaaagggtg ttctctttcc tgcacttctg 120
gtaatcttct tcccctcatc cccccaggcc tgagggttga tattctcaaa taatgtggta 180
ggctcattcc tggctagctt ttgctggca agaataatct ctccctcaaa gtgttcagg 240
taactcttct aaaacatctc atattagtct acaccagata tagtcttct tctagatata 300
ttagagttga ccaagtcttt ccctaaaagg ataattatat aaaagagtag gaacaaagg 360
agtcatttct ctccattctc gagaattaca tcttttaaca catgggcaaa atttaagaca 420
aagacattca ttcattcttg ataaacaagc tactcggtgg tgaagtgagg aggtggaaaa 480
gggcaatgct gagtagaaga acatacgttt tcttctacac acacattaac agatttcatc 540
tcatctagac tagaagaggg ttaatgggac aagtgaagaa atcctctcca cccattgtg 600
aaaagcaaa tagctcctct agcaaatatg cttcagaatt aagtctgatg ctcagaacac 660
tcagatcaaa ttatccttta ttaaaatgaa gcaccagnca agtataggaa aaaaaataaa 720
gggaacttca tctctcacat acaaaacgta cctggcccgg gcggnccgnt cgaaangggc 780
gaaattctgc angatatcca ttcaacactg ggcgggnccg cttcgaacca tgcc 834

```

<210> 37

<211> 613

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 38, 39, 550, 556, 576

<223> n = A,T,C or G

<400> 37

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ccccgcccc cccggcctga taaagcgcgc cgactgggct acaaggccaa gcaagggttac 120
gttatatata ggattcgtgt tcgccgtggg ggccgaaaac gccagttcc taagggtgca 180
acttacggca agcctgtcca tcatgggtgt aaccagctaa agtttgctcg aagccttcag 240
tccgttgagc aggagcgagc tggacgccac tgtggggctc tgagagtcct gaattcttac 300
tgggttggtg aagattccac atacaaatth tttgagggtt tcctcattga tccattccat 360
aaagctatca gaagaaatcc tgacaccagc tggatcacca aaccagtcca caagcacagg 420
gagatgcgtg ggctgacatc tgcaggccga aagagccgtg gccttggaag gggccacaag 480
ttccaccaca ctattgggtg ctctcgccgg gcagcttggt agaaggcgca atactctcca 540
gctccaccgn taccgntaat ataagtaaaa gtttgnaaaa attcatactt aataaacaat 600
ttaggacagg tca                                     613
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<210> 38

<211> 622

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 41, 70

<223> n = A,T,C or G

<400> 38

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ctaactaatn ctaacatctc agacgctcag gaaatagaaa ccgtctgaac tatcctgccc 120
gccatcatcc tagtcctcat cgcctcccca tccctacgca tcctttacat aacagacgag 180
gtcaacgata cctcccttac catcaaatca attggccacc aatggtactg aacctacgag 240
tacaccgact acggcgggact aatcttcaac tctacatac ttccccatt attcctagaa 300
ccaggcgacc tgcgactcct tgacgttgac aatcgagtag tactcccgat tgaagcccc 360
attcgtataa taattacatc acaagacgtc ttgcactcat gagctgtccc cacattaggc 420
ttaaaaaacag atgcaattcc cggacgtcta aacaaacca ctttcaccgc tacacgaccg 480
gggtatatac acggtcaatg ctctgaaatc tgtggagcaa accacagttt catgcccac 540
gtcctagaat taattccctt aaaaatcttt gaaatagggc ccgtatttac cctatagcac 600
cccctctacc ccctctagag cc                                     622
```

<210> 39

<211> 568

<212> DNA

<213> Homo sapiens

<400> 39

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gaggagatgc tgttcatcta tggccactac aaacaagcaa ctgtgggcga cataaatata 180
gaacggcccg ggatgttgga cttcacgggc aaggccaagt gggatgcctg gaatgagctg 240
aaagggactt ccaaggaaga tgccatgaaa gcttacatca acaaagtaga agagctaaag 300
aaaaaatatc ggatatgaga gactggattt ggttactgtg ccatgtgttt atcctaaact 360
gagacaatgc cttgtttttt tctaataccg ttgatgggtg gaattcggga aaataaccag 420
ttaaaccagc tactcaaggc tgctcaccat acggctctaa cagattaggg gctaaaacga 480
ttactgactt tccttgagta gtttttatct gaaatcaatt aaaagtgtat ttgttacttt 540
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa                                     568
```

<210> 40
 <211> 83
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 42, 65
 <223> n = A,T,C or G

<400> 40
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 tatcnagggg gggaaaatcg ttg 83

<210> 41
 <211> 774
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 679, 728, 730
 <223> n = A,T,C or G

<400> 41
 aattcgccct ttcgagcggc cgcccgggca ggtaccattt gcctcccggg ctcaagcgat 60
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 atttttgtaa ttttagtaga gacagggttt caccatgttg cccaggettg tttcgaactc 180
 ctgaccttag gtgatccacc cgctcggcc tcccaaagtg ctgggattac aggcttgagc 240
 cccgcgccc agccatcaaa atgcctttta tttctgcata tgttgaatac tttttacaat 300
 ttaaaaaaat gatctgtttt gaaggcaaaa ttgcaaactc tgaaattaag aaggcaaaaa 360
 tgtaaaggag tcaaaactat aaatcaagta tttgggaagt gaagactgga agctaatttg 420
 cattaaattc acaaaacttt atactctttc tgtatataca ttttttttct ttaaaaaaca 480
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 agttagaacc tggctcctaag cctaaaagtg ggcttgattc tgcagtaaat cttttacaac 600
 tgcctcgaca cacataaacc tttttaaaaa tagaactcc ccgaagtctt ttgttcgcat 660
 ggcacacact gatgcttana tgttccagta atctaatatg gcccagtaa gtcttgatga 720
 cccaaagntn cttttttttc catcttttaga aaactacatg gggaaccaa caga 774

<210> 42
 <211> 264
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 38, 68, 70, 90, 95, 113, 124, 125, 126, 136, 140, 144, 147,
 149, 154, 168, 178, 187, 191, 192, 209, 212, 238, 258
 <223> n = A,T,C or G

<400> 42
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```

atgnnnntttt tacggncgan gatnttnana gttncattcg ggagccancg accaatgnct 180
cctgtgngaa nncagccatc actgtccang gnttcctgtg tcttctcagg gtccttcngg 240
tatcctttga acacggtnng cctc 264

```

```

<210> 43
<211> 432
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 38, 40, 70, 337, 340, 369, 388
<223> n = A,T,C or G

```

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<400> 43
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aaaatgcaaa cgccaaaaaa acgatgcctc ctatgattgt cacagttctg acagagattt 180
tctgtgctat cattcttctt ccaattactg ccaatcccgt gcacaggcag tgcccacag 240
ttccacccac ggctacacca taggggtcct ggaagcaagc gtcacagcat taattcaaaa 300
ccaagggtgac aactgctgct tgagaaccat aacaatncan aagcactaaa aatggtggcc 360
aacaattana aagcataata gttataanaa tgcaggcgtg taataaattt atgaaaggcg 420
tcatggcctg ct 432

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```

<210> 44
<211> 149
<212> DNA
<213> Homo sapiens

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<220>
<221> misc_feature
<222> 70, 72, 126, 144
<223> n = A,T,C or G

```

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<400> 44
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tagaancatg tcagcttcaa atanggata 149

```

```

<210> 45
<211> 597
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 37, 70, 107, 431, 485, 518, 525, 531, 549, 575
<223> n = A,T,C or G

```

```

<400> 45
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cattccattc cattctattc gattaattcc attccattcc attccattcc attctattcc 180
attccattgc aatcgagttg aatccattgc atttcattcc attccattcc attccattcc 240

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<220>
 <221> misc_feature
 <222> 475, 564, 618, 633, 656, 689
 <223> n = A,T,C or G

<400> 48
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 aatgaacaat gatgtcactg gaggggtttt acattaaatt agatcatttt tcttcttatt 180
 cacaataata atcttaattt ttaagaatta attataattt aatattataa ttcataatct 240
 ttaagaatta ataattataa tttaatatta taattaataa tctttaagaa ttaataatat 300
 aatttaatat tataattaat aatctttaag aattaataat tacaattaat aattaataat 360
 aatcttaatc ttttaagaatt aataataatc cttaatcgcg ataataatcg caaggaggag 420
 aagtaagtcc ctctctcttc tgtatgaact tttctccac atgctgctgt atggnttagt 480
 gagagtgaag ttctaaagaa catcaatatg attggtggga taatccaaag acattttttc 540
 agaatcaaag ggcattgcga aggnntgggt cttgcataatg tatttactgg gtccacagcc 600
 aaaataaagg tgaccacnta tacataggaa agntgaattt ggaccctgcc cgggcngggc 660
 cgctcgaaag ggcgaaattc tgcagatanc ccatcac 697

<210> 49
 <211> 341
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 69, 306, 312, 318, 327
 <223> n = A,T,C or G

<400> 49
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 gaatcatcta aaaaacacgg tctcaacctg gccaccgtgg gtgaggcctg accaccttgg 180
 gacacctgca agacgactcc aacccaacaa caaccagatg tgctccagcc cagccgggct 240
 tcagttccat atttgccatg tgtctgtcca gatgtgggtg tgagcggggg tggggctgca 300
 cccagngcat tnggtcancc gccagancta aaaacgcgac g 341

<210> 50
 <211> 617
 <212> DNA
 <213> Homo sapiens

<400> 50
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 ctctgggtct gatcttctca ctgaactcca ccgaccaact gccctaagcc cccagggcct 180
 ccagggccca ggttcgagac ccaaaccccc aaattccaaa acttctcttg aaaagttcag 240
 ggaccgtcca ggggagatgg ggaggagata tggagtgaat cacctgctcc agaagatgcc 300
 agcttctctc tccagggtgc ttagttggct ttgcccaccc ctactcccc agggagctct 360
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 agaccccccc atttcccgca catggtgtgg ggggctgggg gaggtccaag cagagtgttt 540
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ataaaaataa cacagag

617

<210> 51

<211> 326

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 5, 36, 269, 298, 311, 316, 318

<223> n = A,T,C or G

<400> 51

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ttaggctgta tatacagtg aaactatggg ttttaaagt ttggggaaat tcctatggaa 120
aaaagagaga catgtagaag aacctctaac aagggttaat tgcatgccca aggtcttttg 180
aaatttcagt gtgtaaattt ccttttagct tatacaaaaa taaaataatt taaaagaaaa 240
aaaaaaaaa aaaaaaaaaa aaaaaaaang aaaaaaaaaa aaaaaaaaaa aaaaaaangc 300
ccctcggccg naaccncnct aagggc 326
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<210> 52

<211> 123

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 61, 71, 93, 111

<223> n = A,T,C or G

<400> 52

```
aattcgccct ttgagcggcc gcccgggcag gtactcatac ttgatcgatt aatgaagtgg 60
ntattttggg ntgtgcttga tattatcaac tcnctggcaa caacactatt natgctcacc 120
gta 123
```

<210> 53

<211> 326

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 271, 293, 305

<223> n = A,T,C or G

<400> 53

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aattcgccct taggcgtggt cgcgcccgag gtacaccaag cacctat ttaacttag 60
cttcccatgg agagataatg gcttgctgac attttatgta tccataacat acatacaagg 120
ctcggctctt tcaatgggat aacagttcac aactcttcga tttgaattgt aatgaatctg 180
gtgacaagga tttttctcta atggattcca aagttagcca gaacttttaa tgtcaagatg 240
aaaaaggggt taaggtgtta tttttcttc nattccttta ccacaggagg ctnactccac 300
aattngctca tgtttctcat tcagaa 326
```

<210> 54

<211> 557
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 70, 498
 <223> n = A,T,C or G

<400> 54
 aattcgccct tagcgtgggt cgcggccgag gtactacgtt gtagccact tccactatgt 60
 cctatcaatn ggagctgtat ttgccatcat aggaggcttc attcactgat tccccctatt 120
 ctccaggctac accctagacc aaacctacgc caaaatccat ttcactatca tattcatcgg 180
 cgtaaatcta actttcttcc cacaacactt tctcggccta tccggaatgc cccgacgtta 240
 ctccggactac cccgatgcat acaccacatg aaacatccta tcactctgtag gctcattcat 300
 ttctctaaca gcagtaatat taataatttt catgatttga gaagccttcg cttcgaagcg 360
 aaaagtccta atagtagaag aaccctccat aaacctggag tgactatatg gatgcccccc 420
 accctaccac acattcgaag aaccctgata cataaaatct agacaaaaaa ggaagggaatc 480
 gaacccccca aagctggntt caagccaacc ccatgggccc ccatgacttt tttcaaaaaa 540
 aaaaaaaaaa aaaaaaa 557

<210> 55
 <211> 418
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 39, 305, 325, 343
 <223> n = A,T,C or G

<400> 55
 aattcgccct ttcgagcggc cgcccgggag gtacagaant cagaggaaaa aagaaattaa 60
 atttttagctt tctggagagc agcccctctc tggcaccatc aaacacttct ttgtttccct 120
 tcaacttggga actcttcaaa catcaggggt tgtgagggtt tggccattct tttatcttgg 180
 gtccatgtga gtgacagaaa tgggtgcggcc tgggaaagat ctccctcctt tacattttct 240
 cttctccctc ctccctcctt ttctaaaact gtgcctccaa cagaggggca ggggctcttg 300
 taganagatc cctggcccag gacangagat gccaaatcta atntatctca ctgagggcct 360
 ttgagaaaaa cgcttcaggg ccaggctcag tggctcatgc ctatataatc ccagtacc 418

<210> 56
 <211> 360
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 38, 283, 304, 337, 348
 <223> n = A,T,C or G

<400> 56
 aattcgccct tgccgcccgg gcaggtagac agctgtontg gaaagtcttg atggccacag 60
 tgaaaaaggg catgggtgga gagaagcaaa gtaggaagga tcatttgaag cacaacaaaa 120
 tggggaaact gaacagacaa tctcagtatc accacatctg cttcaaaaat agcacaccaa 180

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ctcccttcca aagtgcacg ttacactgca ccatcgtgga agaaatggaa gagcaggatg 240
gatttggtg gctggagtca catcttgggg aagctggcca ggntggcaat gccacaggcg 300
ttgntcttat ttogagccat gaggatatat cctttgnttc cccagctntc tccccagctg 360
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```
<210> 57
<211> 428
<212> DNA
<213> Homo sapiens
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<220>
<221> misc_feature
<222> 73, 82, 105, 147, 168, 191, 196, 204, 215, 218, 225, 227,
236, 253, 260, 266, 269, 280, 287, 309, 317, 321, 339, 349,
352, 355, 356, 363, 374, 391, 403
<223> n = A,T,C or G
```

```
<400> 57
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ccacgtaac tcttaatgtt gccagngtg aactcgccg gctggcanc tgaacaaaa 180
gtcctgatcc ngtagncaca cttnttttt ctaancanga cggangngac attgcnctc 240
ttgttttct tcnngtcatt gatgnggna tacatcttt gcgggtntt gccttttctg 300
agaattgcnt tccctgncag ncctaccaca taccacttnc cctggaatng gntgnnctga 360
aantttctgt gcanagggac cttgttcaca ngcaggggct ggnatcaggt ctgacgtgga 420
gtcctggg 428
```

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<210> 58
<211> 478
<212> DNA
<213> Homo sapiens
```

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<400> 58
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ataaacatgg ttagagcacc tgtgtgcaag atagtgggac aggtgctgag gggaaaggta 180
aagctgttta agctgtggcc ctgagctgaa ggagcaatct agcagtcca tcaggccctg 240
cacactgcag agcacagtgt cccaggggcc aggtggaggg aaggatcact tccggctgca 300
gcatcagga aggactctg cagtctcccc tccaggttct cagcgtgcct ctatgcctgt 360
gtgactgtc agcctgcccc attccaggca cttgtctatc ttccttatct ttctctgtag 420
catgagaaat ggaagtgtga gaggatagga tctacctca caggtacctg cccgggcg 478
```

```
<210> 59
<211> 453
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> 38, 69, 72, 187, 366, 421, 448
<223> n = A,T,C or G
```

```
<400> 59
aattcgccct tcgagcggcg cccgggcagg tacagtgnta gctccccctg ggcaatacaa 60
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```

tacaagaana gnggggttttg tcaaattgga acaaggaaac agaaccacag aaataaatac 120
attggttaac atcagattag ttcaggttac ttttttgtaa aagttaaagt agaggggact 180
tactgtntta tgctaactca agtagactgg aatctcctgt gttctttttt ttttaaattg 240
gttttaattt tttttaattg gatctatctt cttccttaac atttcagttg gagtatgtag 300
catttagcac cactgggtca atgcgctcac ctagggtgaga gtgtgaccaa atcttaaagc 360
attagngcta ttatcagtta ccaccatttg gggcttttat ccttcagggg gtatgatggg 420
ntcctgagga cacatttctc tgagttcngt aat 453

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<210> 60
<211> 407
<212> DNA
<213> Homo sapiens

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<400> 60
aattcgccct tcgaccacca agcgaaacat cgcacgcagc gagcacgtac tcggatggaa 60
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ctgttcgcca ggctcaaggc gcgcagtcgc gacggcgagg atctcgctcg gaccatggc 180
gatgcctgct tgccgaatat catggtggaa aatggccgct tttctggatt catcgactgt 240
ggccggctgg gtgtggcgga ccgctatcag gacatagcgt tggctaccgc tgatattgct 300
gaagagcttg gcggcgaaatg ggctgaccgc ttctcctgct tttacgggat cgccgctccc 360
gattcgcagc gcacgcgctt ctatcgctt cttgacgagt tcttctg 407

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<210> 61
<211> 486
<212> DNA
<213> Homo sapiens

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<400> 61
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gtcatctggt atcaagaaga atttgctaaa agagcggcca gagttgttca tccagggaga 180
cagcgtgcgg ccaggaattc tgggtgctgat taacgatgcc gactgggagc tactgggtga 240
gtggactac cagcttcagg accaggacag cgtcctcttc atctccactc tgcacggcgg 300
ctgagggccc ttctctgggc ctgggcaccc tttaggggga gaacgaagca atcagacatc 360
cccttgggct ctgcttccag gtctccctgt ccccttgcc tgccttcttc cctgctctgt 420
ccctaagct ccctccaggc agggaaaaga ggccaggtgc taaaaatgag cttttctcaa 480
gcaccg 486

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<210> 62
<211> 227
<212> DNA
<213> Homo sapiens

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<220>
<221> misc_feature
<222> 4, 37
<223> n = A,T,C or G

```

```

<400> 62
tcancacat gagggccaac acacacagat cagatgntca aatttcagat cttaccatca 60
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aagcactgtc agccagttag gcagaatacc agcggcagca ggtatgaggg tgggctgaag 180
atatatgctg cagtggaagg gaggaagaag tcagggatgg ggggttct 227

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<210> 63
 <211> 166
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 1, 43, 62, 64, 70, 73, 91, 92, 94, 101, 105, 120, 143
 <223> n = A,T,C or G

<400> 63
 ntaactaaag gagctgggtg catctgtctg tgcggatgga ganttccttt atctgacacc 60
 angnctccan ccncaactgaa acaaggcatt nntntacaga nctcnactaa aacccttttn 120
 cattaggcta ctccacttcc ttncctcat acctacccca cctcgg 166

<210> 64
 <211> 204
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 5, 6, 106, 116, 147, 178
 <223> n = A,T,C or G

<400> 64
 acccnnnggg gcttgtagca cattttaaaa tcacagttat aataatgtct ctcagctaaa 60
 gacactacca catccagatt ctcttgcaag ccatctacag attcanggat gaccgnttca 120
 ctaggcttat tatatttttt caatttnttc tcaaatacaa aacgcaccaa tttctgtntct 180
 tcattacaca gcttggttaag gggg 204

<210> 65
 <211> 425
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 25, 39, 65, 415, 417
 <223> n = A,T,C or G

<400> 65
 ggttcgcggg cgaggaacat agttntggaa attatttgng gtaaggaaat atgggttact 60
 ccagntgcat ttctcagaca ataaagtggg gcatccatgc tacctcctac ttigtcaaca 120
 aagatgctat ttacccttta catttttgta tcataataga ttttaaaaat ctaatgttct 180
 ttattgcaag acattctttt gttaacaggg ttgtttcttt ttaatgtttt acctaaaatt 240
 tgacatgctt acaggacagg tttgcctctt actttattta acattgtaga aatgtaatta 300
 ataaacaatg ctcaactacac agtttagaat agacgctctc atttatatta tcttccaaat 360
 ttgatcagtt agcaaaaactt aatacaccaa ttaaaatatt tctacatatg agaangntca 420
 cactc 425

<210> 66
 <211> 132
 <212> DNA

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<213> Homo sapiens

<220>

<221> misc_feature

<222> 3, 19, 108, 115

<223> n = A,T,C or G

<400> 66

```
tancctgacc acgggcacna ttgctgtgac tcaaactctc cctaattgctg cctataataa 60
ccgcttttca tatgctaattg ttgcttggca agatattgac ttgctgngg atganaaatgg 120
attgcgggat at 132
```

<210> 67

<211> 136

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 3, 46, 90, 97

<223> n = A,T,C or G

<400> 67

```
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ctaattgatc ttgcatacta taattctatn ccaattngac aactccctat ttcctcattc 120
actcccttcc tccttt 136
```

<210> 68

<211> 538

<212> DNA

<213> Homo sapiens

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<221> misc_feature

<222> 70

<223> n = A,T,C or G

<400> 68

```
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accatctttt atgttctttg ccatattctt aaatgcctgg caaacagtag atatttacca 120
gatgaatatg acattaaaaa aataaatttc aagagattga gattctttag ccaagttgag 180
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<210> 69

<211> 248

<212> DNA

<213> Homo sapiens

<220>

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<221> misc_feature
 <222> 38, 229, 242
 <223> n = A,T,C or G

<400> 69
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 tngttaa 248

<210> 70
 <211> 262
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 256
 <223> n = A,T,C or G

<400> 70
 aattcgccct tagcgtggtc gcggccgagg tacctcccca cccaggcctc gtcctttctc 60
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 agtggccagc gtaaggctca ggaacagcag gtaaagctgg ctggcctccc agaatgtgag 180
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 gatgtggaag cagaanggga aa 262

<210> 71
 <211> 242
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 38, 40, 88, 93, 231, 236
 <223> n = A,T,C or G

<400> 71
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 gaattctttc attgtcttct cttcaccaga ttcccaacat tatcaattct ggctcctaga 180
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 ga 242

<210> 72
 <211> 139
 <212> DNA
 <213> Homo sapiens

<400> 72
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 gggtaggaag ggtggaagc 139

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<210> 73
 <211> 845
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 48, 71, 121, 162, 167, 169, 182, 203, 208, 265, 282, 324,
 349, 380, 457, 525, 538, 543, 572, 601, 602, 625, 626, 628,
 629, 651, 663, 674, 678, 679, 687, 699, 708, 709, 718, 720,
 721, 722, 731, 746, 755, 756, 765, 770, 790, 803, 826
 <223> n = A,T,C or G

<400> 73
 tttttttttt tttttttttt tttgagttta aatgcatttt ttttttanac aacctacatg 60
 acatgttttt nttaaaaaaca atgcctccac tccaaataaa tcacagtcaa aataaatgaa 120
 nagctcaaga tgacatcagt cccatttgtc ttaagtcctg gngttgngng gatgacaagc 180
 anaagccagt tatgatgaca ggngatanat ccaaaataat tgccacattt gttaacattt 240
 ttccatttct aaaccatcct taaanaaaat catatatggg gncacaccat cctcacggga 300
 gtccaataga gcaaccatgc catntggatt catgttttca ccaataaana actggtagtt 360
 tttgaaatta gcaaggatgn gcttgatttg ttctgcagcc cctgtcataa aaggttttac 420
 tctttctggg ctctgggtctt caagtttccc ttgatngat ttcattgtaat ctttgatgga 480
 ccttcttgta ggcttctttt gtgaaacttg tttcctgcag ggganggttc atgacaanta 540
 tcnaccccag gggattactg gggctttcgg tnccttcgcc ccctcggggg gccctttcaa 600
 nngggggggc catttttccc ccccnannng gagggccgga aggtccattc naaatggggt 660
 ttnacccttt tttnggggnc ccttacnttg ggaccaant ttttttttnc cttttgcnan 720
 nncttttcga ngggggaaac aaaaancccc cgggnggccg cggnggaaan accttcccc 780
 ggggaaatcn tttgtgaaaa aanggccggg ggaaaaaaa aaattntttt atttctcggg 840
 ggctt 845

<210> 74
 <211> 311
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 33, 55, 61, 76, 107, 122, 131, 139, 152, 174, 176, 180, 190,
 191, 195, 214, 216, 230, 231, 240, 259, 290, 311
 <223> n = A,T,C or G

<400> 74
 tttttttttt tttttttttt tttttttttt ttngcttata aacatccttt attgnacata 60
 nacaggggat actganaatg atcaagtaaa tggaattttg aacaggnaaa gaggaacaa 120
 anaattaagg natccctgng gaatagtgc aanaaggagg gccccacca tagngtatn 180
 tacaataggn nctcngggga aaggaccca agngncaaa ccacaaatgn ntgaccaccn 240
 caattttatg atcaaactnt acctctagca aggggtttca acaatcaagn tttatttaaa 300
 tcattcgctc n 311

<210> 75
 <211> 551
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 533, 540
 <223> n = A,T,C or G

<400> 75
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 taaaggttac tagcttctcc cctggccttg agaccacac gatggccctg ctggctctgg 120
 ccagtgccgt cccgtctgcc ctgctggccc tggctgtctt cagggtgccc gcctgggcct 180
 gtctcctctg cttcacaacc tactctgagc gcctccgcat ctgccagatg tttgttggga 240
 tgcggaagccc caagcttgaa gagtgtgagg aggccttcac ggccgccttc cagggcctct 300
 ctgacaccga aatcagtga gagaccatcc acatttcac agtgtcctgg ggaaggtgca 360
 gagggaggggc aggagaggcc cagaggggtca ggctgaggga cagacagaga gaaacagtca 420
 gaggagaaaag gctcaaagac catgagaaca acagagactt agggacagga gagacacaga 480
 caggggaaga cagcagggca aagactcaga gaggggagga tggagagtca ganaggggan 540
 gatggagact c 551

<210> 76
 <211> 717
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 54, 56, 400, 439, 474, 526, 565, 607, 608, 616, 655, 659,
 694, 717
 <223> n = A,T,C or G

<400> 76
 gacacctgtg gctcttattt cctaggtggc ccgaggcagc cgggatgaca gctntnccca 60
 ggaatcctgc tgcctgctga gaaacatggt cagcaagtcc cgctggaagc tcctggccat 120
 gttggctctg gtcctggctg tcatgggtgt gtattccatc tcccgggaag acaggtagat 180
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 gagtgaggat ctgctcctcc ggggtgctagc catcaccagn tcctccatcc ccaagaacat 420
 ccagagcctc aggtgccgnc gctgtgtggt cgtggggaac ggcaccggct tgcngaacaa 480
 gctcactggg agatgccatc aacaagtacc gatgtgggtc attcanattg aacaatgccc 540
 cagtggctgg ctatgagggt gacgnngggc tccaagaacc accatgcgtt tcttctaccc 600
 tgaatcnnc cacttnacc ccaaagtagg aaaacaaccc cagacacact cctcntcnt 660
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<210> 77
 <211> 874
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 579, 588, 604, 611, 613, 623, 628, 630, 631, 655, 677, 681,
 704, 735, 736, 738, 764, 767, 774, 782, 784, 814, 815, 837,
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 <223> n = A,T,C or G

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<400> 77
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aactgtttct ccaggctgga ccagtagtca acaccacat gccaaaggat agagtcaactg 180
gccagcacca aggctatggc tttgtggaat tcttgagtga ggaagatgct gactatgcc 240
ttaagatcat gaacatgata aaactctatg ggaagccaat acgggtgaac aaagcatcag 300
ctcacacaa aaacctggat gtaggggcca acattttcat tgggaacctg gacctgaga 360
ttgatgagaa gttgctttat gatactttca gcgcctttgg ggtcatctta caaaccccca 420
aaattatgag ggacctgac acaggcaact ccaaaggtta tgcctttatt aattttgctt 480
catttgatgc ttcgatgca gcaattgaag ccatgaatgg gcagtacctc tgtaaccgtc 540
ctatcacctg atcttatgcc cttcaagaaa gggactccna ggggtgangc gccattggct 600
cacnagccga ncnacttctt ggnagctnan naaccgctc tcccaggctg atggnccctc 660
ttcagcttgt ttgcagnggc nctcctcca ccttttgcct ccnaccgtg tggatcatc 720
attgggggtc tgggnntnct cccccaggca tgctctctcc tggnttnttc cccncccccc 780
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<210> 78
<211> 887
<212> DNA
<213> Homo sapiens

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<220>
<221> misc_feature
<222> 661, 704, 706, 725, 732, 733, 764, 767, 806, 824, 859, 874
<223> n = A,T,C or G

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<400> 78
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ggctggagaa agcggcgggc gaggatggag gaaggaggcg gcggcgtagc gactctgggt 180
ccgggcgggc cgggtgttact ggtcctctgc ggcctcctgg aggcgtccgg cggcgccga 240
gcccttcctc aactcagcga tgacatccct ttccgagtca actggcccgg caccgagttc 300
tctctgcccc caactggagt tttatataaa gaagataatt atgtcatcat gacaactgca 360
cataaagaaa aatataaatg catacttccc cttgtgacaa gtggggatga ggaagaagaa 420
aaggattata aaggccctaa tccaagagag cttttggagc cactatttaa acaaagcagt 480
tgctcctaca gaattgagtc ttattggact tacgaagtat gtcattgaaa acacattcgg 540
cagtaccatg aagagaaaga aactggtcag aaaataaata ttcacgagta ctaccttggg 600
gaatatgttg gccaaagaacc ttctatttga aaaagaacca agaaagcaga agaaaaggaa 660
naatcaaatg aagattcccc acttaaaaaa tatccgaagg gtcnanaatg acaccatta 720
cttantcctt gnnggggaat gggggaaaaa tgggtccac cctntgntag gttttggaaa 780
aacaagaaac cccgggcccc cagaanacaa aagataacct gggnggaatg gtaaccatta 840
atggtccaat tcccttggn aattcttaaa agcnattgga aaaaatt 887

```

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<210> 79
<211> 640
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 41
<223> n = A,T,C or G

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<210> 80
<211> 982
<212> DNA
<213> Homo sapiens
```

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<221> misc_feature
<222> 835, 840, 842, 862, 863, 867, 872, 875, 878, 893, 898, 907,
908, 916, 923, 960, 972
<223> n = A,T,C or G
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<210>	81
<211>	885
<212>	DNA

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ctggcagggg	gcggggcgca	cgcaggccac	accacttca	ggctcccacc	cggtcgctgg	180
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aatcataagc	ggggagccgg	tgcacctgag	gaaggagacc	ctgagggaga	taagatggag	360
gggctcggga	ttccggggag	ccccaagtc	cagcttgaaa	cggtggagtc	cgggcaaattg	420
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<210> 83
 <211> 705
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 9, 37, 38, 43, 655, 688, 702
 <223> n = A,T,C or G

<400> 83
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 caagaaataa gaagcggggc tggcggcggc ttgtcagga gccgctggg ctggagggtg 180
 accagttcct ggaagacgtg cggctacagg agcgcacgag cgggtggctt ttgtcagagg 240
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 agagaaccaa agtccagaag aagtcactgc ttctcaagaa accccttcgg gttgacctca 360
 tcctcgagaa cacatccaaa gtccctgccc ccaaagacgt cctcgcccac caggtcccca 420
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 tgccccggga ggtgcgcagg gccccaggccc ggctcctcaa cccttctgca acaagggcca 540
 agccccgggc cccaggacac cgtagagcgg cccttctacg acctctgggc ctgagacaac 600
 cccttgagca ggccgttggt tggccaggat gagtttttcc tgggagcaga cccangaaga 660
 aaggagtga acggccagca cgctgcnc cccaagccc tncca 705

<210> 84
 <211> 587
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 10, 33, 40, 59, 65, 66, 67, 80, 83, 84, 96, 101, 103, 107,
 113, 131, 143, 147, 163, 170, 171, 180, 182, 286, 560, 581
 <223> n = A,T,C or G

<400> 84
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 gagctggaag natccgaaag gcnttcntgt tgagacttta ganactgaan ntaaggatcn 180
 anatatatca tatccccaag tggaatgaag aagaacgcaa aagaagagag cagcagaaac 240
 atgcaaaga acaggaggag ctgaatgatg ctgtgggatt ttctanagtc attcacgcca 300
 ttgctaattc gggaaaactt gttattggac acaatatgct cttggacgtc atgcacacag 360
 ttcatcagtt ctactgccct ctgcctgcgg acttaagtga gtttaaagag atgacaacat 420
 gtgttttccc cagactcttg gatactaaat tgatggccag cacacaacct tttaaggata 480
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<210> 85
 <211> 620
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature

<222> 252, 499, 536, 540, 563, 564, 567, 581, 614

<223> n = A,T,C or G

<400> 85

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gggaggctga cactaggctg aactcattaa ggaatgaatg ggaggtgaga agacacaggc 180
agcaagaatc gagtgtttca agaagtttgg ctctggtttg ccagaaatag gcaagtcagt 240
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caagcatgtt cacatgataa agaggaagaa agagaaagag gctggagatt ctgaaaagag 360
atcactggtg aggtctcaaa agagatggaa gaggatggtt atgtagttgg ggaaagaaat 420
ttaagaagg gaagaaaatt aaaatgagtg aaggatatac ttagttttgt aaaagttatc 480
aatatctggc tgggcacant gctcacacct gtaatcccag cactttggga ggccanggen 540
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tactaaaaat accnaaaatt                                     620

```

60
 120
 180
 240
 300
 360
 420
 480
 540
 600
 620